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RECORD OF ORAL HEARING  
UNITED STATES PATENT AND TRADEMARK OFFICE  

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* SATOSHI HOSHINO

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Appeal 2009-004475  
Application 09/899,075  
Technology Center 3600  

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Oral Hearing Held: September 9, 2009

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Before MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and  
BIBHU R. MOHANTY, *Administrative Patent Judges*.

ON BEHALF OF THE APPELLANT:

Ebanesar Thomas, Esquire  
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The above-entitled matter came on for hearing on September 9, 2009 at the  
U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia,  
before Timothy J. Atkinson, Free State Reporting, Inc.

1 PROCEEDINGS

2

3 MS. BOBO-ALLEN: Calendar No. 7, Appeal No. 2009-4475, Mr.  
4Thomas.

5 JUDGE CRAWFORD: Good morning.

6 MR. THOMAS: Good morning.

7 JUDGE CRAWFORD: You can begin whenever you're ready.

8 MR. THOMAS: Okay.

9 JUDGE CRAWFORD: At the podium. First time?

10 MR. THOMAS: Second time. Won't be the last time.

11 JUDGE CRAWFORD: Okay.

12 MR. THOMAS: All right. I'm Ebanesar Thomas. I will be  
13representing NEC Corporation in this Application No. 09/899,075. Before I  
14begin, is there any questions that you want me to --

15 JUDGE CRAWFORD: I would like to talk a little bit about your  
16claim 1 because I don't -- I mean, it says an authenticity checker for driver's  
17license comprising a driver's license image capturing module for image  
18capturing a watermark. So is this claim to one watermark or two  
19watermarks?

20 MR. THOMAS: It is to capture a watermark on -- it could be on other  
21the obverse side or the reverse side of it. So it will be a watermark, but it  
22could be on either the front side or the back side of it so --

23 JUDGE CRAWFORD: Well, then if it's only one watermark, how are  
24you comparing the watermark?

25 MR. THOMAS: It is just to check if one of the sides has it or not. If  
26both of the sides do not have that watermark, then it would have been

1considered to be a forged driver's license, so if at least one side -- the one of  
2the sides has it, and the watermark is a valid watermark, and then it would  
3have been a valid driver's license.

4 JUDGE CRAWFORD: Okay, I'm still confused, because it says here  
5it judges whether the license is authentic if at least one of the watermarks is  
6recognized. So I don't know whether you've got one watermark, two  
7watermarks. It -- let me ask you this question.

8 MR. THOMAS: Yes.

9 JUDGE CRAWFORD: When they have the driver's license, is a  
10watermark definitely just on one side?

11 MR. THOMAS: Yes, it's just not sure if it's on the top or the bottom  
12side.

13 JUDGE CRAWFORD: Okay. So then to me, I don't think the claim  
14makes sense. Go ahead.

15 MR. THOMAS: So --

16 JUDGE CRAWFORD: See because it -- in that case it says -- it  
17should say judges whether the driver's license is authentic if there is a valid  
18watermark on at least one side rather than saying if at least one of the  
19watermarks is recognized. So I was under the impression that the driver's  
20license might have a watermark on the face and a watermark on the reverse  
21and that your invention was to determine whether at least one of those  
22watermarks was valid.

23 MR. THOMAS: It is actually to just see if it's -- the prior art already  
24had it on -- the detection system on the prior art had it so that if it was  
25entered in there it would just check to see if there is a watermark there, but  
26the inventor had analyzed it and noticed that if a light was flashed from the

1top, because there's two type of watermarks. It could be a face watermark or  
2the back watermark, and if the light was irradiated from the top and the --  
3captured on the bottom, the watermark in one instance would be clear as if it  
4was done the other way around. So then he had determined that, you know,  
5there are two types of watermarks that could be on these driver's license, and  
6based on that two types of watermark either the --

7 JUDGE CRAWFORD: Are you saying that if there is a watermark on  
8the obverse side and you checked with transmission you wouldn't get  
9anything?

10 MR. THOMAS: It would get something. It just wasn't -- wouldn't be  
11clear enough for -- to validate -- it could -- the system sometimes had  
12provided that it wasn't a valid even though it could have been a valid license.  
13So it just wasn't clear enough. Like in the background section it's described.  
14So like in the last portion of the background section, it talks about how the  
15prior art system might make the driver's license to be false by mistake just  
16because it's not clear enough. Doing it from the other side would not have  
17produced a clear watermark for you to compare or to validate the license.

18 JUDGE CRAWFORD: So I still don't see -- I still don't understand  
19the claim. Okay, continue.

20 MR. THOMAS: So in the prior art references though cited the  
21Koffune reference, it's directed towards -- so like a bill or a paper type thing  
22which has a -- with just patterns on the top and then possibly a watermark,  
23and the way the Koffune reference validates the bill it's to pretty much the  
24problem that the forgeries in these bills were either because the two types of  
25counterfeit bills were being made. One is the -- using a copy machine that  
26was transparent copy machine, and the other one was the reflective copy

1 machine. So in the Koffune system, they use a reflection light and a detector  
2 for that and a transmitter light and a detector for that to -- and then whatever  
3 the result is they get based -- after the bill has passed through, they get the  
4 pattern signals from the reflector light and then the reflector detector and  
5 then the transmitter detector and see if they coincide. So basically if  
6 someone had used a copy machine which was a reflective type one, only  
7 reflective type one. Then when the detector detects it, it -- the -- both of  
8 them will coincide.

9       So for example, if you'd notice in figure 8D through G, they show  
10 how in a system where just only one of them had been used the -- for  
11 example, 8D and 8E, the center output of that bill would be the same that  
12 would -- as it would be a forged bill, and so here they use the outputs from  
13 both the detectors and compared the outputs with each other, and if they  
14 coincide then it will be detected as a forged bill. In the Applicant's  
15 invention, the determination is to see if one of them has the watermark and if  
16 the watermark was a regular watermark or a valid watermark. And based on  
17 that, the judging was performed.

18       And the other dependent claims that were provided, for example,  
19 claims 5 and 6, they correspond to figure 6, for example, and here we  
20 claimed a camera and then a light opposite to the lens of the camera, and a  
21 revolving means which revolves the driver's license to -- so one, it will have  
22 the obverse side facing so it can take a picture of that, and then it would have  
23 a reverse side of it. So just revolving means to throw at it to flip the driver's  
24 license, and this element is not even taught in Koffune or the conventional  
25 systems.

1 And similarly, claim 7 which is -- corresponds to figure 7, here the  
2Inventor and the Applicants provide a set of optical systems using mirrors  
3and optical elements claimed as the first and the second optical system  
4which propagate the light, for example, if the light from the light is directed  
5from element 225 and it would -- the mirrors would capture that light and  
6transmit that light through the optical systems to the camera and then  
7similarly from the reverse side of it when element 224 sends the light  
8through, and it would be captured on the mirrors 226, 227 and to the camera.  
9So these -- the elements of these two claims, basically claims 5, 6, 7 and 8,  
10are not talked about or even considered in any of the references that have  
11been cited.

12Is there any other questions you might have?

13 JUDGE CRAWFORD: I don't have questions. Do you have  
14questions, Judge Fischetti?

15 JUDGE FISCHETTI: I got -- can you take me through how Koffune  
16in figures 8D through G overcomes as you say is not -- does not meet claim  
17language of claim 1?

18 MR. THOMAS: Okay. So first just to briefly just talk about the  
19judging module of claim 1, it's directed towards if neither the detection from  
20the obverse side nor the reverse side does not have a regular watermark, then  
21it judges it to be a forgery, and then if at least one of the watermarks is  
22recognized as a regular watermark, then it would be authentic.  
23But in the way the Koffune reference detects and detects the forgery is, for  
24example, in figure 8A there are set of patterns, for example, pattern A and C  
25which are just regular prints, and then there's a watermark D that could be  
26placed inside the bill. And in a true bill when a pattern is trying to be

1detected, for example, using the reflection lamp which is 8B, the -- you  
2could -- the output of it has an element where the pattern A and pattern C  
3are, it has produced a little -- like the output is I guess lower level, shows a  
4lower level. But it doesn't pick up the watermark D. If it, for example,  
5goes -- it still reads it as there's nothing there. And with the -- if a  
6transmission light sensor is being used, then it actually detects that  
7watermark D, so it actually shows like a lower level showing that there's  
8something detected at that area.

9But if it's a forged bill, for example, using something that's -- that is not like  
10the copy machine that does the like transmission light type copy machine,  
11the whole print would -- will just be like the watermark like pattern A and  
12pattern C, and the watermark D would also will have the same type of  
13material that corresponds to that. So your output of the reflection light  
14would, for example, be 8D, because it will detect that just like there's some  
15pattern there, and then you will have a -- when the transmission light goes  
16through, then it will still detect that there's still a pattern there. So therefore,  
17they both will detect that there's a pattern there even though in a real, true  
18bill, the pattern should not be detected, because it only should be detected  
19through the reflective light.

20And similarly with the other one also, if the whole thing was done through  
21the transmission type thing, then it's the same thing where both of them  
22wouldn't detect the forgery. I mean so the signal output will still be the same  
23again.

24 JUDGE FISCHETTI: So you're saying with the transmission light  
25sensor of 8C though, I do get a detection of the watermark?

26 MR. THOMAS: Yes, you detect the watermark D, yes.



1 JUDGE FISCHETTI: I do get a detection of the watermark?

2 MR. THOMAS: Yes, because the -- it is --

3 JUDGE FISCHETTI: So why doesn't that answer the claim limitation  
4then under 8C in that embodiment using transmission light sensor?

5 MR. THOMAS: Because it doesn't check from both the sides of it,  
6that the whole portion of the claim, it includes two sets of two limitations  
7where it has to check both sides of it, because the capturing module has to  
8check to see if there's watermark on both sides of the --

9 JUDGE FISCHETTI: All right.

10 MR. THOMAS: Okay. Are there any other questions?

11 JUDGE CRAWFORD: I don't have any.

12 MR. THOMAS: Okay.

13 JUDGE CRAWFORD: Thank you.

14 (Whereupon, the hearing concluded on September 9, 2009).